

What I claim as new and desire to secure by Letters Patent of the United States is:

1. An apparatus for reinforcement of a pipe length with inner and outer surfaces and formed with a solid thermoplastic organic polymer which includes:

5 (a) pipe feeding means which continuously transports the pipe length in a linear travel direction for operative association with rotating fiber supply means,

10 (b) fiber supply means which rotate about the circumference of said moving pipe length to continuously apply a plurality of juxtapositioned reinforcement fiber wraps in a predetermined spatial direction on the outer surface of said moving pipe length, and

15 (c) heating means which causes thermal bonding to be continuously formed between the applied reinforcement fiber wraps and the outer surface of the moving pipe length.

2. The apparatus of claim 1 which includes a plurality of fiber supply means.

3. The apparatus of claim 1 which includes mechanical cut-off means operatively associated with the fiber supply means to terminate reinforcement fiber application.

4. The apparatus of claim 1 wherein the fiber supply means comprises a cylindrical winder mechanism operatively associated with a rotary fiber spool.

5. The apparatus of claim 4 wherein the fiber spool provides the juxtapositioned reinforcement fibers in a matrix formed with a solid thermoplastic organic polymer.

6. The apparatus of claim 1 wherein the pipe feeding means provides continuous linear motion at a constant velocity.

7. The apparatus of claim 6 wherein the pipe feeding means is carried out with a moving belt drive mechanism.

8. The apparatus of claim 2 wherein the individual fiber wraps are aligned in different spatial directions.

9. The apparatus of claim 1 wherein the heating means employs a cylindrical heater surrounding the fiber wrapped pipe length.

10. The apparatus of claim 1 wherein the pipe feeding means continuously supplies a plurality of discrete pipe lengths joined together at the ends.